

Remarks

Claim rejections – 35 USC § 103

Claims 1, 2, 7-10, 13-33, 35-37, and 40-45 stand rejected under 35 USC § 103(a) as being unpatentable over *Buttolph* in view of *DeBray*. The examiner acknowledges that the *Buttolph* reference fails to disclose the claimed feature of the sleeve being split along one side to clamp around the drill string. *DeBray* is cited as disclosing the feature of the split and being clamped in place. The examiner contends that:

“...it would have been obvious to one of ordinary skill in the art to modify Buttolph such that the sleeve was split and clamped around the drill pipe, rather than threadedly attached in order to enable the sleeve to be connected to the drill pipe “at most any location along the string” (Debray et al Column 4 lines 26-28) rather than being constrained to the areas which had threads....”

All of the independent claims rejected on this basis (1, 35, 36, 44, 45) share the same feature of the sleeve being split to clamp around the drill string.

In this response, no amendments to the claims have been made and it is noted that the current examiner's objections are the same as those which were raised in the previous office action mailed September 3, 2010. The sole remaining question concerning the present application is whether it would be obvious to modify *Buttolph* in view of *DeBray* by clamping the *Buttolph* device to the drill collar. If the skilled person would not have done so, then the invention is not obvious and the rejections currently outstanding should all be withdrawn, and the claims should be allowed without further amendment. As indicated in the previous response, Applicant wished to discuss this issue with the examiner before a further office action was issued, and again

requests a telephone interview to discuss this in more detail, should the examiner have any remaining questions after considering this response.

It is well established that (when used to support an obviousness rejection) **a proposed modification cannot render the prior art unsatisfactory or inoperable for its intended purpose**, *In re Gordon*, 733 F.2d 900, 221 USPQ 1125 (Fed. Cir. 1984); MPEP§2143.0IV.

That is precisely what is established by the attached Declaration of Paul Gwyn Williams, which clearly states that one skilled in the art would never consider modifying the apparatus of *Buttolph* by incorporating the clamping feature of *DeBray* since it would render the *Buttolph* device unable to withstand the jarring forces need to dislodge it from the well bore, which ability is an important feature of the *Buttolph* invention.

The examiner has explained his reasoning for sustaining the rejections of the claims, and for dismissing the evidence presented by Mr. Williams in the declaration filed with the response of February 3, 2011. It is most respectfully submitted that several of these conclusions of the examiner presented in the office action appear to be based on technical misunderstandings. In order to address these and to reply to the currently outstanding rejection of the claims applicant submits herewith a second declaration under 37 CFR 1.132 made by Mr. Paul Williams, which clarifies the technical issues that appear to have been misunderstood. Mr. Williams is competent to speak about the actions and understanding of a skilled person in connection with this issue.

First of all the examiner appears to base the rejection on his understanding that *DeBray's* device is designed to withstand ALL of the same forces that *Buttolph's* device would experience. Applicant respectfully points out that this conclusion does not reasonably follow from the examiner's observation that both *DeBray* and *Buttolph* centralize and stabilize the drill string. Firstly, *Buttolph's* device is not connected to the drill string, but to the drill collar, which

Buttolph himself makes clear is different from the drill string. Also, just because *Buttolph* and *DeBray* share one function, this does not support the conclusion that they are therefore equivalent in respect of their capacity to withstand “ALL of the same forces” as the examiner has suggested in the first full paragraph on page 8 of the office action. In fact *Buttolph* clearly discloses that it is important that the drill guide 10 (the same drill guide as shown in Figs 1, 2 and 3 of *Buttolph*) can be jarred. See the discussion of this in the attached declaration. This ability to jar and withstand the high axial forces inherent in that operation is *important to Buttolph*, but would not be possible with the *DeBray* device because *DeBray’s* device would not resist the very high axial forces involved. As previously indicated, jarring is technically incompatible with the possibility of splitting the sleeve and clamping it in place. It simply would not be possible to merely clamp the sleeve tightly enough to the drill collar to withstand the enormous axial forces that would be applied to the clamped modified sleeve in such jarring operations. A modified clamp-on sleeve subjected to normal jarring forces would lose grip and slide up or down the drill collar in such jarring operations, rather than remaining in place and transferring the axial force to the drill collar.

Therefore, even if, as the examiner contends, the *Buttolph* and *DeBray* devices both do the job of centralizing something within the well, the *Buttolph* device has other important functions (e.g. jarring) which dictates that the *Buttolph* device must be adapted to withstand very different forces than the *DeBray* device. Therefore the examiner’s conclusion that the two devices are designed to withstand ALL of the same forces cannot be supported.

Furthermore, the examiner’s rejection also appears to be based on his observation that modifying *Buttolph* to be clamped would not negatively impact its ability to perform its primary function (of centralizing). As pointed out already, the modification suggested by the examiner WOULD negatively impact at least the jarring capability of *Buttolph*, as shown by the declaration, and this jarring capability is specifically stated by *Buttolph* to be an “important feature”. Therefore,

whether the suggested modification would affect the ability to centralize is moot. A skilled person would instantly appreciate that even if he could still centralise the drill collar with the modified device, he would be unable to jar it as taught by *Buttolph* as a direct result of the modification, and using the modified device would then carry an increased risk that the drill collar could become stuck and the modified device would not be able to withstand the normal process of jarring to free it. Hence, the skilled person would not make the modification suggested as it would remove the ability to jar.

This alone is sufficient to demonstrate why the skilled person would instantly see the potential problems with losing the ability to jar the *Buttolph* device when stuck. As *Buttolph* himself warns the skilled man reading the document, this kind of structure often gets stuck in the hole, and the solution to that recommended by *Buttolph* is to ensure that the stuck drill guide 10 can be jarred loose (see column 7 line 15 onwards). A skilled person would certainly NOT ignore this warning and deliberately change the drill guide so that it could not be jarred loose. The stuck drill guide would then be stuck in the hole without any prospect of retrieving it economically.

Accordingly the skilled person would not modify *Buttolph* by the teachings of *DeBray* to make it a clamp-on instead of an integral device.

The other independent claims 35, 36, 44 and 45 rejected on this same basis all include the same clamping feature claimed in claim 1, which is completely contrary to the teachings of *Buttolph* as explained above, and therefore are also allowable for the same reasons. The dependent claims also rejected include the clamp feature by virtue of their dependence, and so are also allowable for the same reasons.

Accordingly, the rejection of the claims 1, 2, 7-10, 13-33, 35-37, and 40-45 under 35 USC § 103(a) on the basis of *Buttolph* in view of *DeBray* is respectfully traversed.

Claim 5 has been rejected under 35 USC § 103(a) over *Buttolph* in view of *DeBray* and *Yancey*

Claim 5 includes the recitations of independent claim 1 by its dependency therefrom. As discussed above, claim 1 is allowable over the combination of *Buttolph* and *DeBray*. Claim 5 is therefore allowable at least by virtue of its dependency. The skilled person who considered these references in addition to *Yancey* would also find that both the *Yancey* and *Buttolph* references advocate a solid annular (ring shaped) sleeve and hence would be led even further AWAY from considering a split sleeve as shown in the Fig 1 embodiment of the invention claimed, which has a sleeve structured to be opened to fit around a drill string and closed to clamp around it. Accordingly the embodiments of the invention as claimed in any of the present claims, including claim 1 and claim 5, are NOT obvious over the combined disclosures of *Buttolph*, *DeBray* and *Yancey*.

The examiner's rejection of claim 5 on this basis is thereby respectfully traversed.

Claim 34 has been rejected under 35 USC § 103(a) over *Buttolph* in view of *DeBray* and *Shizawa* (JP62101149). Claim 34 is dependent from claim 1.

As set out above, a skilled person would not be led to modify the *Buttolph* device by using a modification that involved splitting the sleeve and clamping it onto the string, rather than using a cylindrical sleeve as the *Buttolph* reference teaches. Accordingly, the ordinarily skilled person would not consider the *DeBray* system to be at all useful as a source of potential modifications. As explained above, the ordinarily skilled person would therefore not be motivated to combine the teachings of *Buttolph* and *DeBray* and thereby arrive at the invention claimed in claim 1, and so would be equally not motivated to combine those two references with *Shizawa* to arrive at the invention claimed in claim 34. Claim 34 is therefore allowable at least by virtue of its

dependency on allowable claim 1. In any event, *Shizawa* is not even concerned with wellbore apparatus, and does not consider any of the problems solved by the embodiments of the present invention. A skilled person would accordingly derive no motivation from *Shizawa* to adapt the *Buttolph* apparatus in any way.

The rejection of present claim 34 is therefore respectfully traversed.

It is respectfully submitted that the present application is now in condition for allowance, and such action is respectfully requested. Should the Examiner have any further issues regarding this application, the Examiner is requested to contact Applicant's attorney at the phone number below.

Respectfully submitted,

MIDDLETON REUTLINGER

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/Charles I. Sherman/
Charles I. Sherman
Registration No. 22,998
401 South Fourth Street
2600 Brown & Williamson Tower
Louisville, KY 40202
(502) 625-2745 direct phone
(502) 561-0442 fax
CSherman@middreut.com